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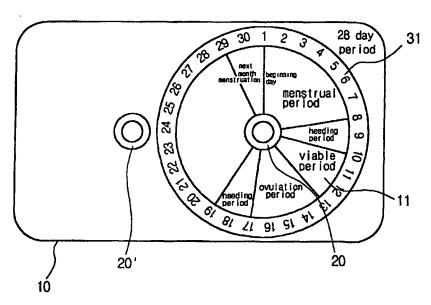
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#### (54) Title: MENSTRUATION CALENDAR



(57) Abstract: The present invention relates to a menstrual calendar capable of estimating an expectant date of pregnancy or contraception easily and conveniently, using a woman's menstrual period. According to an embodiment of the present invention, there is provided a menstrual calendar characterized in that, the calendar comprises a base plate (10) on whose opposite surfaces a period indicator (11) is formed, rotating plates (30, 30') formed with a transparent window (32) and a date indicator (31) respectively, and fixed pins (20, 20'). According to another embodiment of the present invention, there is provided a menstrual calendar characterized in that, the calendar comprises a base plate (10') on whose opposite surfaces a menstrual beginning line (1) and a menstrual period (2) is displayed, the first rotating plates (40, 40') formed with an expectant pregnancy period displayer (13) and a period indicator (12), the second rotating plates (50, 50') formed with a transparent window (32), respectively, and fixed pins (20, 20').





For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

## MENSTRUATION CALENDAR

## FIELD OF THE INVENTION

The present invention relates to a menstrual calendar used a natural periodical technique, more particularly to a menstrual calendar capable of estimating an expectant date of pregnancy or contraception easily and conveniently, using a woman's menstrual period.

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#### BACKGROUND OF THE INVENTION

In general, the women of probable pregnancies a method for estimating roughly the appropriate date of pregnancy or contraception by checking the menstrual period on the calendar has been used mainly by the women of probable pregnancies. However, such a method not only needs cumbersome tasks for hand estimating the date one by one, but also has a concern to give not the least woman physical and mental pains due to the unwanted pregnancies caused by incorrect estimation of menstrual period, resulting in opting abortions in many cases, thus inflicting physical sufferings once more and imposing monetary burdens on the women.

#### SUMMARY OF THE INVENTION

The present invention has been studied out to solve the above problems, and the object of the present invention is to provide a menstrual calendar capable of estimating an expectant date of pregnancy or contraception easily and conveniently, using a natural periodical technique.

As a technical method for attaining the object above mentioned, in Embodiment 1, there is provided a menstrual calendar, comprising: a base plate 10 on whose opposite

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surfaces a period displayer 11 is formed, rotating plates 30, 30' formed with a transparent window 32 and a date indicator 31 respectively, and fixed pins 20, 20'. In Embodiment 2, there is provided a menstrual calendar characterized in that, the calendar comprises a base plate 10' on whose opposite surfaces a menstrual beginning line 1 and a menstrual period 2 is displayed, the first rotating plates 40, 40' formed with an expectant pregnancy period displayer 13 and a period indicator 12, the second rotating plates 50, 50' formed with a transparent window 32, respectively, and fixed pins 20, 20'.

#### BRIEF DESCRIPTION OF THE DRAWINGS

- Fig. 1 is a plan view of a menstrual calendar according to Embodiment 1 of the present invention.
  - Fig. 2 is a rear view of Fig. 1.
  - Fig. 3 is a disassembled perspective view of Fig 1.
  - Fig. 4 is a sectional view of I-I line of Fig. 1.
- Fig. 5 is a plan view of a menstrual calendar according to Embodiment 2 of the present invention.
  - Fig. 6 is a rear view of Fig. 5.
  - Fig. 7 is a disassembled perspective view of Fig 5.
  - Fig. 8 is a sectional view of I-I line of Fig. 5.
- Fig. 9 is a longitudinal cross section of a menstrual calendar according to Embodiment 3 of the present invention.
  - Fig. 10 is a longitudinal cross section of a menstrual calendar according to Embodiment 4 of the present invention.
- Fig. 11 is a plan view of a menstrual calendar according to Embodiment 5 of the present invention.

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#### DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention will be described in more detail with reference to the preferred embodiments illustrated in the attached drawings.

Fig. 3 is a disassembled perspective view according to Embodiment 1, wherein a menstrual calendar is made based on 28 days, the menstrual period. The calendar is characterized in that, it comprises a base plate 10 on whose opposite surfaces a period displayer 11 is formed respectively, on which a menstrual period showing menstruation, a heeding period showing possible pregnancy, a viable period showing survival of

sperm, and an ovulation period showing expected ovulation are displayed; round rotating plates 30, 30', on whose central portion, a transparent window 32 is formed respectively to be mounted on the period displayer 11 of said base plate 10 in such a manner that the period displayer 11 can be seen, and on whose peripheral surface, a date indicator 31 showing dates of 1st~30th, 1st~31st is formed respectively; and fixed pins 20, 20' which fix said rotating plates 30, 30' rotatively.

According to the menstrual calendar constructed as above mentioned, as shown in Fig. 1, if the menstruation of a woman begins on the 1st inst., she may set the 1st on the date indicator 31 to the beginning date of menstruation period formed on the base plate 10. Accordingly, the probable period of her pregnancy may be from 10th through 17th, and there is also a probability to be from 8th through 19th. In addition, if the period of her pregnancy for next month is to be estimated, she may turn the rotating plates 30, 30' round to set the 29th, the beginning day of the next menstruation, to the beginning date to estimate the period.

Fig. 7 is a disassembled perspective view according to Embodiment 2, wherein a calendar is made to be able to estimate the period optionally based on the individual

menstrual period. The calendar is characterized in that, it comprises a base plate 10' on whose opposite surfaces a menstrual beginning indicator 1 and menstrual period displayer 2 of 24~32 days are formed respectively; round first rotating plates 40, 40' which are mounted on said menstrual beginning indicator 1 and said menstrual period displayer 2, and on whose surfaces, an expectant pregnancy period displayer 13 showing the heeding period, the viable period and ovulation period is formed, with the surface of other than said expectant pregnancy period displayer 13 being transparent, and a period indicator 12 in one direction is formed respectively; round second rotating plates 50, 50' which are mounted on said first rotating plates 40, 40', and on whose central portions, a transparent window 32 is formed respectively in such a manner that the menstrual period indicator 12 of said base plate 10' and each expectant pregnancy displayer 13 of said first rotating plates 40, 40' can be seen, and on whose peripheral surface, a date indicator 31 showing dates of 1st~30th, 1st~31st is formed respectively; and fixed pins 20, 20' which fix said first rotating plates 40, 40' and said second rotating plates 50, 50' rotatively.

According to the menstrual calendar constructed as above mentioned, as shown in Fig. 5, if the menstruation of a woman begins on the 1st inst., she may turn the first rotating plates 40, 40' round to set the period indicator 12 to the 28 days among 24-32 days of the menstrual period, and turn the second rotating plates 50, 50' round to set the 1st on the date displayer 31 to the menstrual beginning indicator 1 printed on the base plate 10'. Accordingly, the probable period of her pregnancy may be from 10th through 17th, and there is also a probability to be from 8th through 19th. In addition, if the period of her pregnancy for next month is to be estimated, she may turn the second rotating plates 50, 50' round to set the 29th, the beginning day of the next menstruation, to the menstrual beginning indicator 1.

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In case that the menstruation began on the 30th previous month and the last day of the month was the 31st, with the calendar on the rear surfaces of the base plates 10, 10' (refer to Fig, 2 and 6), the date of probable pregnancy can be estimated conveniently by opting the date between 30th and 31st attached discriminately on the opposite surfaces of the base plates 10, 10'. Only, in case of February when the days are 28 or 29, some amount of inconvenience must be tolerated.

The date estimation of the present invention is based on the nearest beginning date of menstruation, and it is the general conception that the period approximately from 24 days through 32 days before and after 28 days is regarded as normal, based on the medical materials such as Ogino's periodical method.

As described above, the present invention provides a menstrual calendar, based on a natural periodical technique, and enabling the estimation of the menstrual period and pregnant or contraceptive period conveniently as well as correctly, thus preventing various problems such as unwanted pregnancy beforehand, which is likely to be caused by incorrect estimation of menstrual period.

The present invention is not limited to the embodiments above described, but as shown in Fig. 5 and Fig. 10, it can be used one fixed pin considering cost and design in the manufacturing process of the product, and as shown in Fig. 11, it can also be used with separating lines drawn between the dates on the date displayer 31 to prevent the error of estimation.

The present invention relates to the problems that every women of probable pregnancy faces, can expect a high possibility of domestic and export demands, and can be used efficiently for various objects, for example, for an educational material in case of the size and material of the plates being varied differently.

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#### WHAT IS CLAIMED IS:

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- 1. A menstrual calendar characterized in that, the calendar comprises:
- a base plate 10 on whose opposite surfaces a period displayer 11 is formed respectively, on which a menstrual period, a heeding period, a viable period, an ovulation period are displayed;

round rotating plates 30, 30', on whose central portion, a transparent window 32 is formed respectively to be mounted on the period displayer 11 of said base plate 10 in such a manner that the period displayer 11 can be seen, and on whose peripheral surface, a date indicator 31 showing dates of 1st ~30th, 1st ~31st is formed respectively; and fixed pins 20, 20' which fix said rotating plates 30, 30' rotatively.

- 2. A menstrual calendar characterized in that, the calendar comprises:
- a base plate 10' on whose opposite surfaces a menstrual beginning indicator 1 and menstrual period displayer 2 of  $24 \sim 32$  days is formed respectively;

round first rotating plates 40, 40' which are mounted on said menstrual beginning indicator 1 and said menstrual period displayer 2, and on whose surfaces, an expectant pregnancy period displayer 13 showing the heeding period, the viable period and ovulation period is formed, with the surface of other than said expectant pregnancy period displayer 13 being transparent, and a period indicator 12 in one direction is formed respectively;

round second rotating plates 50, 50' which are mounted on said first rotating plates 40, 40', and on whose central portions, a transparent window 32 is formed respectively in such a manner that the menstrual period indicator 12 of said base plate 10' and each expectant pregnancy displayer 13 of said first rotating plates 40, 40' can be seen, and on whose peripheral surface, a date indicator 31 showing dates of 1st ~30th, 1st ~31st is

formed respectively; and

fixed pins 20, 20' which fix said first rotating plates 40, 40' and said second rotating plates 50, 50' rotatively.

Fig. 1

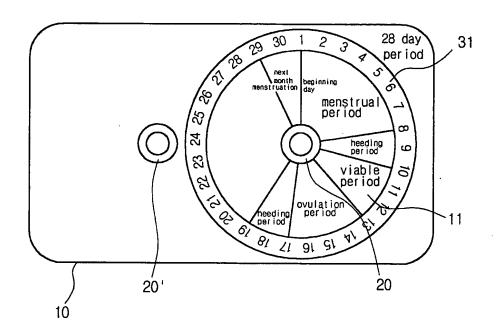


Fig. 2

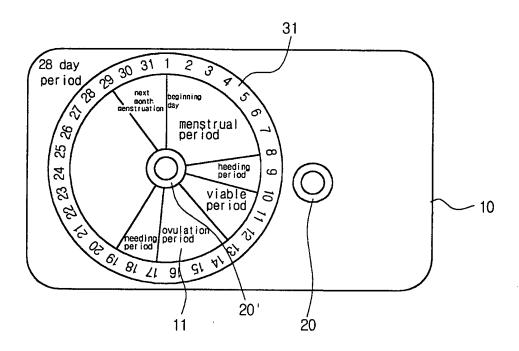


Fig. 3

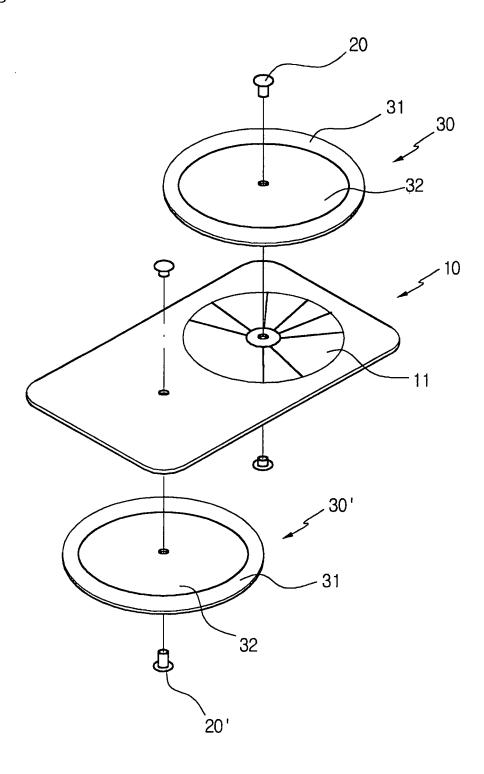


Fig. 4

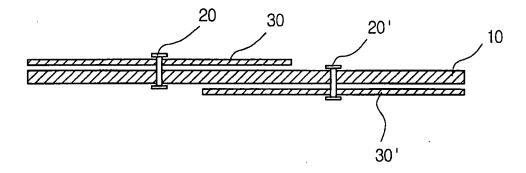


Fig. 5

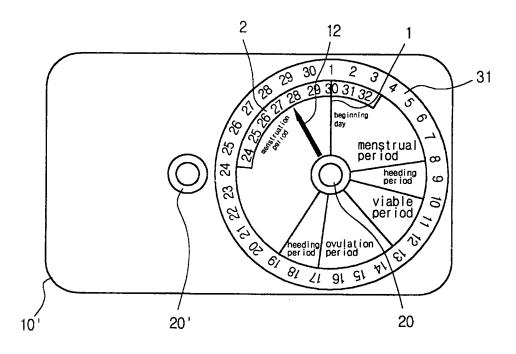
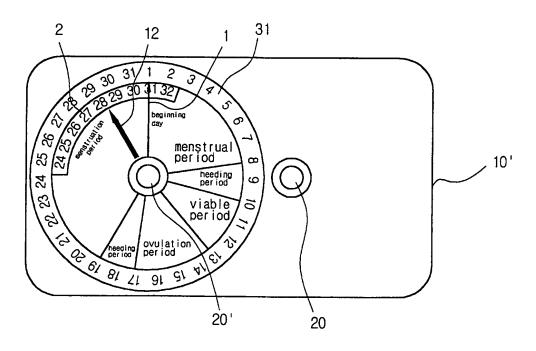
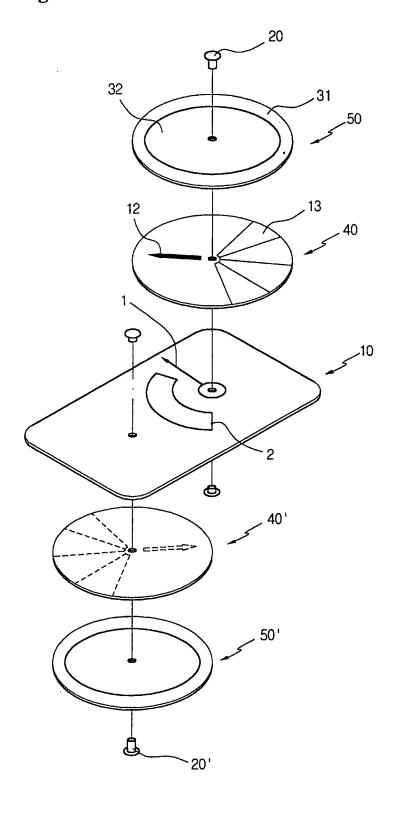


Fig. 6



**Fig. 7** 



**Fig. 8** 

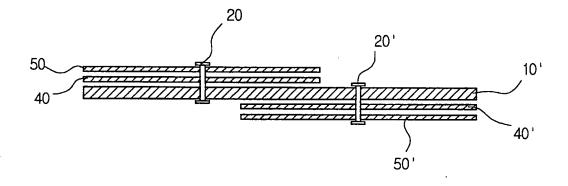


Fig. 9

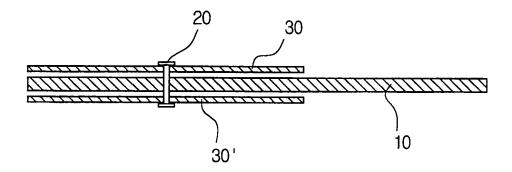


Fig. 10

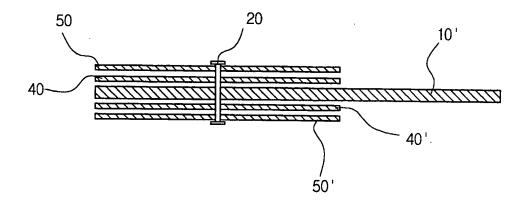
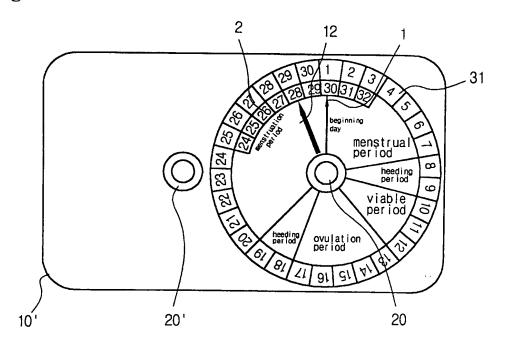


Fig. 11



## INTERNATIONAL SEARCH REPORT

Facsimile No. 82-42-472-7140

International application No. PCT/KR00/01315

A. CLASSIFICATION OF SUBJECT MATTER			
IPC7 B42D 5/04, G06C 3/00			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimun documentation searched (classification system followed by classification symbols)			
IPC7 B42D 5/04, G06C 3/00			
Documentation searched other than minimun documentation to the extent that such documents are included in the fileds searched			
Korean patents and applications for invention since 1975, Korean utility models and applications for utility models since 1975			
Japanese utility models and applications for utility models since 1975			
Electronic data base consulted during the intertnational search (name of data base and, where practicable, search trerms used) NPS, PATROM			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.
Α	US 3,964,674 A1 (Harry Van der Gaast) 09 May 19	75	1
	See the whole document; figures		
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Α	US 4092521 A1 (Manfred E. Weisshaar) 04 May 19 See the whole document; figures	976	1
Α	US 4350878 A1 (Karl H. Schwarz; Ingrid Schwarz)	18 May 1981	1
	See the whole document; figures		
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A	KR 98-59279 U (MA HYUNG CHUL) 26 October   See the whole document; figure 1	1998	1
Α	KR 85-1480 Y1 (GO KI YUN) 15 July 1985		1
	See the whole document; figures		
Α	JP 62-201825 U (YAMAGUCHI HUSI) 23 Decemb	er 1987	1
	See the whole document; figures		
Further documents are listed in the continuation of Box C.  See patent family annex.			
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Date of the act	ual completion of the international search	Date of mailing of the international search re	port
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